

## Overview

Brazil has a large and diversified economy that offers US companies many opportunities to export their goods and services. As Brazil's largest single trading partner, the US enjoys a strong reputation in a variety of sectors. This report is one of a series that is published by the US Commercial Service's team of sector experts throughout the year. If you do not see an opportunity for your product here, please check out our other reports at [www.buyusa.gov/brazil](http://www.buyusa.gov/brazil) and consider contacting us directly to find out if we can help you export to Brazil.

## Infrastructure Forecast

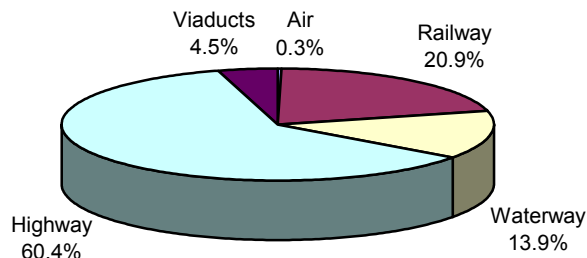
Global economic forecasts indicate that trade between North America and Latin America will increase significantly in coming years. Trade in goods is expected to more than double, from 260 million tons to 560 million tons, by 2020. Coordinated policies to promote efficient and secure hemispheric trade transport will be needed to accommodate this growth. These policies must consider many factors, including the degree of national infrastructure development, intermodal system connectivity, technology deployment, institutional arrangements to support trade transport development, and effective cargo and vessel security systems.

The structural bottleneck in Brazil's transportation sector is considerable—it is a drag on GDP growth and adds to what's known as the "Custo Brasil": the cost of doing business in Brazil. According to the World Trade Organization statistics for 2003, Brazilian exports accounted for one percent of world trade in goods, while Belgium had a three percent share. Currently, Brazil's infrastructure could not accommodate a significant increase in exports, because existing modes of transportation are already operating close to their capacities.

Investment in the Brazilian infrastructure is both inevitable and crucial as the country endeavors to expand its share of global export transactions. In 2004, Brazil set a new record for its exports, with approximately US\$100 billion in sales of soybeans, iron, meat, maize, tobacco, sugar, airplanes, automobiles, footwear and several other products. The government expects a 5 percent growth in exports in 2005. The official export forecast for 2006 is US\$100 billion.

In the Brazilian government's Bi-Annual Investment Plan (2000-2003), allocated investment resources for transportation infrastructure were US\$13.3 billion. European companies are poised to capture a large share of the proposed investments by offering package deals that include long-term financing. Unfortunately, US companies are not taking full advantage of alternative financing sources offered by the government, particularly by Ex-Im Bank ([www.exim.gov](http://www.exim.gov)), which could greatly increase their chances of selling U.S. made products.

### Brazilian Transportation: 2003



Source: GEIPOP – Brazilian National Department of Transit

The government's Public Private Partnership (PPP) project will undoubtedly alleviate some of the pressure for government expenditure enabling the private sector to participate in those investments that are required in order to lessen existing bottlenecks and improve system efficiency

Brazil's public and private investment in infrastructure has fallen from about 7 percent of GDP in the 1970s to 1.5 percent in 2003. This was the result of fiscal policy objectives that necessitated drastic cuts in public spending. While public infrastructure investment was decimated, the government failed to establish an appropriate climate for private investment. The government's need to run primary surpluses in order to comply with IMF guidelines is seriously limiting its capacity to finance projects that are strategically important for the country's development.

In spite of the broad privatization program of the 1990s, private investment in infrastructure remains at about one percent of GDP. As a result of increasingly low levels of investments, Brazil has lost ground, in terms of quantity and quality of infrastructure, to its East-Asian competitor China and India. The current administration wishes to remedy this disparity by raising the level of private infrastructure investment to at least 3 percent of GDP.

Recent research shows that infrastructure investments in Brazil should be substantially increased to enable the economic growth and job creation needed to reduce poverty and to improve living standards. Some have estimated that infrastructure investments in Brazil would have to reach about 5 percent of GDP to maximize the impact of economic growth. This is similar to the conclusions reached by other developing countries. Different sources estimate that US\$20 billion in annual investment over the next few years would be necessary in order to gradually eliminate the existing bottlenecks in the Brazilian economy.

## Public Investment

Currently, there are two ways the Brazilian government solicits public investments. The first one is by public auction - the government contracts and pays for work performed. The second one is by concessions - the public sector transfers public property to a private enterprise, which assumes the responsibility of investing in it in accordance with rules and regulations settled in contract. A return on these investments must be attained solely through the management of the enterprise, by means of toll collection, tariffs, etc.

Concessions prioritize activities whose cash flow can guarantee the amortization and the remuneration of the applied resources. One drawback could be the absence of immediate return on investment, even if prospects for medium and long-term returns are good.

The Public Private Partnership (PPP) law announced recently by the government proposes to fill this gap. Contracts of up to 30 years would allow private companies to obtain, totally or partially, the necessary resources for the execution of a project. The public sector would provide an immediate return on investment by guaranteeing a minimum yield to the business; something forbidden by the current law of concessions today.

The project also supplies parameters for case-by-case definition for payment model and guarantees. The government hopes that the PPP will attract R\$36 billion (US\$13.3 billion) by the year 2007. In spite of this new model and the effort set forward, the regulatory environment of the countless activities that might be involved in the PPP process plays a crucial role for the success of the partnerships.

## The Logistics of Transportation in Brazil

The Brazilian agricultural sector faces a special challenge in its need to transport large volumes of low-value cargo across long distances. Brazil's high transportation costs and port fees can quickly eat away at agricultural margins. In 1995 for example, shipping a ton of soy from New Orleans cost just US\$3.00 whereas the cost to ship the same product from the Brazilian port of Paranaguá exceeded US\$14.00. The average cost to transport the product between the production regions of the US and the port of New Orleans by waterways (an average of 2,000km) was just US\$16.00 per ton. In Brazil, this cost exceeded US\$80.00 per ton for the same distance due to poor infrastructure conditions. That year, in order to overcome this problem, the Federal Government began to encourage the development of multimodal transportation corridors based on the use of waterways. It also began privatization programs for railroads and ports.

Despite environmental delays in the construction of certain waterways such as the Araguaia-Tocantins and the Tietê-Paraná, the implementation of multimodal transportation corridors and the privatization of railroads and ports have jointly been responsible for a 40 percent reduction in the cost of grain transportation and a 50 percent reduction in port fees.

In February 1993, the Port Modernization Law (Law 8,630/93) privatized the management, but not the ownership, of Brazil's ports. Since its enactment, more than 100 concessions for private and hybrid terminals have been granted. The government has accelerated concessions of private terminals in Brazil's main outlet ports and has embarked on a process of rationalization of the management of port labor—one of the lobbies responsible for the high port charges.

Considering the prospects for the expansion of agricultural borders, existing trade flows of production, and the main consumer markets (including potential markets), the Brazilian government has decided to concentrate on five principal corridors: the Northwest, the Central-North, the Northeast, the Central-East, and the Southeast.

### The Northwest Corridor

The Northwest Corridor covers an arable land estimated at over 16 million hectares located north of the state of Mato Grosso and east of the state of Rondônia. The main modes of transportation in the region are rivers and roads. The first route, between the junction of roads BR 364 and 235 and the city of Porto Velho follows road 364. The second route, between Porto Velho and the port of Itacoatiara (in the state of Amazonas), follows the Madeira River for 1,115 km. Between Itacoatiara and the Atlantic Ocean, the route runs along the Amazon River. This corridor mostly serves the pre-Amazon region comprised of the Parecis Plateau in the states of Mato Grosso and Rondônia, the cerrado area adjacent to federal road 364, which connects Cuiabá (the state capital of Mato Grosso) to Rio Branco (the state capital of Acre) going through Porto Velho (the state capital of Rondônia), and areas bordering the Madeira River. Another outflow alternative would be road BR 363 connecting Cuiabá to Santarém, in the Amazon River.

### The Central-North Corridor

In the Central-North Corridor the main routes are: 1,230 km of navigable waters in the Araguaia River; 420 km of navigable waters in the Mortes River (located in the state of Mato Grosso); 420 km of navigable waters in the Tocantins River; a 1,500 km-long area on road BR-010 (connecting Belém to Brasília); a 230 km-long area in the North-South Railroad; and a 600 km-long area in the Carajás Railroad between Açailândia (in the state of Maranhão) and the Port of Ponta da Madeira in São Luís (the state capital of Maranhão).

It is important to emphasize that part of this corridor, on the route located between Estreito (Maranhão) and São Luís may be used as outflow for grains originating in the production regions of southern Maranhão and in the state of Piauí. The Central-North corridor therefore comprises a huge area of the Cerrados region, which covers over 20 million hectares in the states of Tocantins (47 percent), Goiás (20 percent), Mato Grosso (15 percent), Pará (7 percent), Maranhão (6 percent), Bahia (3 percent), and Piauí (2 percent).

### The Northeast Corridor

The Northeast Corridor covers all the regions located north of the state of Minas Gerais, as well as in the states of Bahia and Pernambuco. The Corridor is formed by the navigable area of the São Francisco River between the towns of Pirapora and Petrolina (Pernambuco), and by the road network extending

from Petrolina to the main capitals and ports of the northeast. It also enables a railroad connection between Petrolina and the ports located in the states of Pernambuco and Paraíba.

The Central-East Corridor

The production of the northwestern portion of the state of Minas Gerais and the central portion of the state of Goiás (an area of approximately 1.5 million hectares) flows through the Central-East Corridor. It uses the Vitória-Minas Railroad (owned by the Vale do Rio Doce Company) between the Port of Tubarão and the city of Belo Horizonte, as well as a railroad line to be built connecting Belo Horizonte to Pirapora (Minas Gerais) and on to Unai (Minas Gerais).

The Southeast Corridor

The Southeast Corridor comprises the Tietê-Paraná Waterway and enables the flow of the production from the states of Mato Grosso do Sul and São Paulo to the main exporting ports located on the mouth of the Prata River. This corridor has a strong interface with the transportation system of the southeastern region. The construction of the Jupia dam extended the waterway by 700 km, and connected São Paulo and Foz do Iguaçu (in the state of Paraná) and, therefore, between São Paulo and the exporting ports of the Prata River and the country's central-western region. The construction of the waterway enabled the interconnection between the northern and southern portions of the Paraná River, which, together with the Prata and Paraguai, made possible the use of barges along 7,700 km of waterways.

Waterway Sector – Overview

Brazil, with its 4,000 kilometers of Atlantic coastline and thousands of kilometers of navigable rivers, is privileged in terms of navigable waterways. A large proportion of the navigable rivers, however, are in the Amazon region, which lacks a large producer or consumer market. From an economic standpoint, the most important stretches of waterway are in the Country's Southern and South Eastern regions.

Brazil has approximately 40,000 km of waterways, 14,000 km of which are suitable for navigation. The main waterways are in the following hydrographic regions: Amazon (19,000 km), Tocantins (3,200 km), São Francisco (2,000 Km), Paraná (2,400 km), Paraguay (3,400 km), Southern Coastal (1,300 km) and Uruguay (1,200 km).

A unique natural factor that has influenced the development of inland waterway transport in Brazil is the fact that most of the highly developed regions aren't served by navigable rivers. That's the case, for instance, in the metropolitan regions of São Paulo and Belo Horizonte. This reality impeded the development of inland waterways, but opened the way for the rapid highway expansion that has been prevalent these last decades.

In the Amazon region, easy river navigation is guaranteed by the favorable hydrographic conditions, with approximately 19,000 km of waterways, amongst the Amazon, Solimões, Negro, Branco, Madeira, Purus, Juruá, Trombetas, Jari, Tapajós, Xingu, Guama and Capim rivers.



Ministry of Transport data show that the waterway sector accounts for only 0.9 percent of the transport matrix of Brazil, carrying only 25 million tons of cargo on inland waterways in 2001. While this is insignificant in terms of total cargo transported within the country, the development of waterways is considered essential as a means of making the country more competitive in the international grain market.

The Brazilian network of waterways classified by the government as short-term navigation possibilities, reaches the surprising mark of 25,000 km. If used to its full potential, no other transportation alternative in Brazil could compete with this breadth.

The existing waterway infrastructure in the North and Middle West of the country is centered around the Rio Madeira, the Paraguay-Parana Waterway, and the Araguaia-Tocantins Waterway. The Brazilian Government believes that the development of the three navigable rivers in these regions will solve many of the major transportation problems facing Brazil's soybean industry.

Full use of other navigable waterways depends on the construction of locks, some minor dredging work, and especially ports, which will allow for integration of different modes of transport. Among the main waterways of Brazil, the Brazilian Ministry of Foreign Affairs highlights the following two in its report about the Brazilian transportation sector. More information can be found at: <http://www.mre.gov.br/cdbrasil/itamaraty/web/ingles/economia/transp/apresent/index.htm>

**Tietê - Paraná Waterway**  
According to a report done by the Ministry of Foreign Affairs on Brazilian transportation, this waterway is of enormous economic importance because it affords transport of grain and



other goods from three States: Mato Grosso do Sul, Paraná and São Paulo. The 1,250 kilometers of navigable waterway are divided between the 450 kilometers which are part of the river Tietê in São Paulo, and 800 kilometers which are part of the river Paraná, on the border of São Paulo with Mato Grosso do Sul and on the frontier of Paraná with Paraguay and Argentina. Bringing the whole 1,250 kilometers into operation will require the construction of a lock at the Jupia dam, in order to connect the two stretches.

#### **Taquari - Guaíba Waterway**

Running through Rio Grande do Sul for 686 kilometers, the Taquari - Guaíba Waterway is the main waterway in Brazil in terms of cargo transportation. It is served by a fleet of 72 barges, which are capable of carrying a total of 130,000 tons. The main products transported are grain and oil. One of the most important features of this waterway is that it is well served by integrated terminals, which allow easy transfer of cargoes.

#### **Waterway Sector – Challenges**

Environmental issues and lack of federal government investment are the main barriers to the implementation of a developed waterway infrastructure in Brazil.

It's common in Brazil to find cases where federal judges have suspended waterways projects due to irregularities in the development and the conclusions of environmental impact assessments. Local indigenous tribes, agricultural groups, and landless movements commonly use legal tactics to oppose waterway projects. International groups have also expressed concern over such projects.

The Araguaia – Tocantins waterway case provides an example of environmental issues creating legal barriers in the waterway sector. In 1998, the Government of Brazil undertook a feasibility study for a waterway project in the Araguaia and Tocantins River and concluded that the project would require public and private investments of US\$570,000. However, the project was put on hold pending approval of an environmental impact assessment. Indigenous and environmental groups entered the battle demanding an end to the A-T Waterway Project. Various groups representing indigenous peoples and environmental rights convened a conference at the Federal University of Mato Grosso to criticize the Araguaia-Tocantins Waterway project. In 2001, the Brazilian House of Representatives gave in to public pressure and passed a bill that prohibited industrial navigation along the Araguaia River due to environmental issues. Interestingly, the bill has increased the political viability of the North-South Railway (Ferrovia Norte-Sul) and North Railway (Feronorte) as an alternative form of transportation. The issue is still under discussion among the Government authorities involved.

In addition, a uniform market in the inland waterway sector does not yet exist from a traffic management, legal or economic point of view in Brazil. The Government has neither developed a way to attract private sector investment nor found a way to generate revenues from this sector.

#### **Waterway Sector – Investment**

Waterway projects have not been a priority for the Government of Brazil. The Minister of Planning, Guido Mantega, does not mention any waterway project in his Public-Private Partnership presentation from June 23, 2004, ([www.planejamento.gov.br](http://www.planejamento.gov.br)) and the Brazilian National Transit Department (DNIT) has not reported any waterway projects either. Therefore, the current projects are the result of private sector and NGOs feasibility studies on key waterway projects, which soybean producers and industry experts want to develop in order to take Brazilian agricultural production to the country's main ports.

#### **Madeira-Amazon Waterway**



The Madeira-Amazon waterway, inaugurated in April 1997, has undergone improvements to allow night navigation. It flows from Porto Velho, capital of the northern state of Rondônia, to Itacoatiara, a city in the state of Amazonas. In Itacoatiara the cargo is shipped on the Amazon River until it reaches the Atlantic Ocean, and then sails to destinations abroad. Today the waterway transports about 2 million tons of soy and corn per year to the Atlantic Ocean. On the way back, as in Feronorte, the vessels carry imported fertilizers.

The Rio Madeira offers the best hope for improving grain transportation in Brazil, because it is a free-flowing navigable river that is already in full operation. Nine-barge tows move up and down the Rio Madeira, each carrying 2,000 tons. However, for U.S. companies there is little business opportunity. The river requires no public investment to maintain a navigable channel. A modern barge loading facility is located at Porto Velho and a small, modern barge-to-ocean vessel transfer facility is located at Itacoatiara on the Amazon River. The Madeira waterway has a capacity to move between 2 and 3 million tons yearly without investments in the river. Thus, the Rio Madeira opens the New Frontier in Mato Grosso to world soybean markets.

Although new rail and the waterway projects have helped overcome logistics bottlenecks in Mato Grosso, they are mainly located on the borders of the state and even outside of it. To get to the river ports, the cargo still has to travel long distances

on trucks. "These undertakings helped transportation in Mato Grosso considerably, but are not yet the complete solution. There is still a lot to do," states Homero Pereira, Secretary of Rural Development.

According to the Ministry of Foreign Affairs report on transportation, the Paraguay – Parana, Araguaia – Tocantins, and the Sao Francisco River waterways are first in line to receive public and private investment.

#### **Paraguay - Parana Waterway**

The Waterway Paraguay - Parana flows south from central Mato Grosso through the Pantanal (blue circle)--a huge wetland and the most beautiful tourist attraction in Brazil--into Paraguay and Argentina to the export port of Rosario in Argentina. A barge loading facility is planned for construction in Morrinhos, in the middle of the Pantanal. In addition, the government of Mato Grosso plans to build a road to this facility. However, numerous non-government organizations are expected to fight this proposed development.

#### **Araguaia - Tocantins Waterway**

Tocantins is the largest basin located entirely within Brazil. During floods, when water levels are high, navigation along the Tocantins river is possible along 1,900 km, between the cities of Belém, in the State of Pará, and Peixes, in Goiás. The river's hydroelectric potential is partly exploited at the Tucuruí Power Station, in Pará. In turn, the Araguaia River crosses the State of Tocantins from North to South and navigation is possible along 1,100 km of its course. Construction of the Araguaia-Tocantins Waterway aims at creating a passageway in the North Region with interaction of different transport modalities.

#### **Sao Francisco Waterway**

Between the highlands of Serra da Canastra, its source in the State of Minas Gerais, and its estuary, on the boundary between the States of Sergipe and Alagoas, "Velho Chico" (Old Chico), as the main river, wholly included in Brazilian territory, is known - is the main water supplier of the semi-arid region of the Northeast. Its main navigable tract of 1,300-km flows between the town of Pirapora, in Minas Gerais and Juazeiro, in Bahia. Along its course are the following hydroelectric power stations: that of Paulo Afonso and Sobradinho, in Bahia; Moxotó, in Alagoas; and Três Marias, in Minas Gerais. The main projects currently underway along its course aim to improve daytime navigability and to allow navigation at night. Source: [www.mre.gov.br](http://www.mre.gov.br)

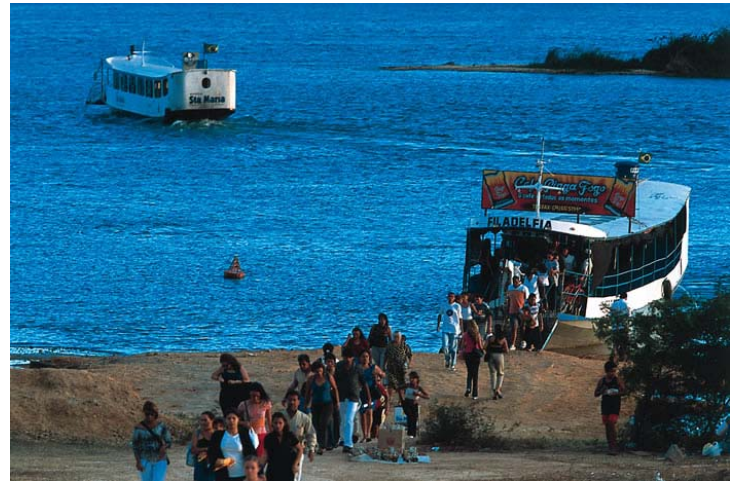
#### **Tapajós/Teles Pires Waterway**

According to a State of Pará study:

The Tapajós River, a tributary on the right bank of the Amazon River, runs 851 km to the fork of the Rivers Juruena and Teles Pires. Its mouth, close to the port of Santarém, is 949 km from Belém and 753 Km from Manaus.

When completed, the Tapajós-Teles Pires waterway would become the main outlet for the agricultural border of north and northeast Mato Grosso and for the great area of Pará.

While it would take 18 months and about US\$60 million to make the waterway commercially navigable, the average cost of transport between the area of Cachoeira Rasteira and



Santarém would be just US\$4 per ton. In its first 6 years of operation, the Tapajós-Teles Pires Waterway would save nearly US\$64 million in shipping costs.

To make the Tapajós-Teles Pires Waterway project a reality, navigation channel delimitation, channel construction, overthrow services, floodgate construction, and some dredging will be required. Other needed improvements include a road and waterway terminal near Cachoeira Rasteira for grain embarking, as well as improvements in the Port of Santarém to move cargo to marine ships for export. Source:

[www.cdpara.pa.gov.br](http://www.cdpara.pa.gov.br)

#### **The Taquari-Guaíba Waterway**

Running through Rio Grande do Sul for 686 kilometers, the Taquari - Guaíba Waterway is the main waterway in Brazil in terms of cargo transported. It is served by a fleet of 72 barges, which are capable of carrying a total of 130,000 tons. The main products transported are grain and oil. One of its most important features is that it is well served by integrated terminals, which allow easy transfer of cargoes. As far as traffic is concerned, other waterways have more importance at the local level, mainly for the transport of passengers and the supply of river communities.

#### **Port Sector – Overview**

Approximately 93 percent of Brazilian international trade is done through ocean freight, making investment in ports a top priority for the Government of Brazil. Until 1990, Portobrás (Empresa Brasileira de Portos S.A.), the federally owned port administration company, was responsible for virtually all aspects of public port administration and policy. This control extended to tariff policy and even decisions concerning new investments. Upon the demise of Portobrás, the Brazilian public port system was restructured into eight federally owned Port Authorities in various Brazilian states, five state concessionaires and one private port concession. The Port Modernization Law (Law 8,630/93) was promulgated in February 1993, decentralizing, deregulating and reducing state control of the sector. According to this law, the port sector is to be managed through the issuance of tenders for the leasing of terminals and other port facilities, and the establishment of private concessions.

From January to August 2004, five of Brazil's major ports registered higher than average export volumes. A survey made by the Ministries of Industry, Economy and Foreign Trade, pointed out that the port of Santos alone - responsible for 28 percent of all exports - experienced an increase of 39 percent in shipping over the same period in 2003. The port of Santos is used for shipping grain, soybean, automobiles, coffee beans and beef.

The privatization and removal of regulatory impediments to competition has already taken place in the logistics and maritime express cargo sector. This has already resulted in an estimated US\$2.5 to US\$3 billion in investments.

The southern ports of Rio de Janeiro, Santos and Rio Grande have become important container terminals with gantry cranes for loading/discharging 20' and 40' containers. They offer easy access to rail and road transport and are equipped with mobile machines for handling containers. They also feature extensive paved yards for stacking and storage. The port of SUAPE Industrial Complex, located in the eastern-most part of Brazil, has one of South America's most important deep-water ports. SUAPE will be able to dock vessels up to 170,000DWT and has an operational depth of 14.5 meters.

Ports such as Fortaleza, Salvador, Ilheus, Vitoria, and Paranagua also handle large numbers of containers with conventional shore cranes and/or ship's gear. Some have specific berths with priority for container vessels, but they are, as yet, without container gantry cranes. They do, however, have mobile equipment for handling the container units on shore.

#### Port Sector – Challenges

Port modernization is an ongoing process. Although Brazilian companies generally have world-class cargo logistics and are constantly seeking to improve cost-effectiveness, they operate under an unfavorable fiscal regime. This hampers their operations and reduces the overall competitiveness of Brazilian exports. Achieving cost standards comparable to international norms will only be achieved in the medium term. Brazilian efforts to achieve competitive shipping costs are significant and translate into excellent opportunities for U.S. service consulting firms.

Currently, Brazilian ports face several problems such as the lack of investment in port-highway access, lack of parking spaces for trucks, lack of space for storage, lack of technology to monitor container movement within the port, lack of dredging to remove barriers, as well as management/labor issues. Such deficiencies increase operational costs for foreign trade and delay delivery of merchandise to international clients. The so-called "Brazilian Cost" places the cost of shipping in Brazil 20 percent above the international average. Brazil's average shipping/port costs are US\$41.00 per ton compared with US\$18.00 in the USA and US\$17.00 in Argentina. In Santos (the largest freight terminal in Latin America), 30 containers can be loaded in one hour for about US\$250.00 per unit. In Singapore, 100 containers can be loaded in one hour for US\$70.00 per unit. The cost of loading and unloading a vessel represents 37 percent of the total operational cost of a

Brazilian port. Moreover, dredging costs in Brazil are 2-3 times higher than the world average due to a current duopoly in dredging services.

If ports are not modernized to become more efficient, there are fears that Brazil's export-led growth will become capacity constrained and miss a historic opportunity. According to the vice-president of Conselho Nacional de Transporte CNT (National Transportation Council) Meton Soares Junior, modernization of the ports infrastructure is fundamental. "Today we have 47 ports in the country but we can't waste time with the small ports...we need to select 7 large outstanding ports and invest in them to upgrade them to international standards of technology and productivity. It is important to have large ports to act as hubs," he said.

#### Port Sector – Investment

Federal investment alone cannot meet the heavy capital requirements of the port sector. To help overcome this barrier, President Lula signed a Provisional Law that creates incentives for the modernization and the expansion of port infrastructure, best known as *Reporto*. The new legislation will give tax incentives to port operators across the country to invest in new machinery and modern equipment.

US suppliers should be aware that an unparalleled opportunity exists in 2005 for port-related exports. The Brazilian government has recognized a need for significant imports to help make port operation more efficient and secure. As a result, it has made several categories of imports duty-free for port upgrades.

Estimated investment necessary to bring the Brazilian ports up to international standards totals US\$1.6 billion. Brazil's Ministry of Transportation plans to use US\$750 million (about half of its 2005 budget) on port modernization. In order to modernize ports, operators will need to invest in:

- Additional security and control equipment.
- Traffic control equipment.
- Yard management equipment and software.
- Additional cranes and material handling equipment.

According to the Brazilian Container Terminal Association (Associação Brasileira de Terminais de Containers – ABRATEC), the private sector has invested \$400 million in 10 affiliated terminals since 1995, and expects to invest \$150 million more by 2007. The association foresees an 8.8 percent annual growth in container transportation at the terminals starting in 2004.

The Brazilian Ministry of Transportation plans to invest more than US\$157 million in seven Brazilian ports as part of its Agenda Portos initiative. The goal is to eliminate legal, institutional and operational issues that compromise port activities in 11 of the 54 Brazilian ports. As part of a deal worked out with the IMF, improvements on the ports of Santos (SP), Rio Grande (RS), Vitória (ES), Rio de Janeiro (RJ), Itajaí (SC), São Francisco do Sul (SC), and Sepetiba (RJ) will not be computed as governmental expenditures. The government



also plans to invest in Paranaguá (PR), Salvador (BA), Aratu (BA) and Itaqui (MA), although they are not part of the IMF deal. Together, these ports are responsible for 89 percent of Brazil's exports. Agenda Portos considers the most pressing needs to be improved investment in dredging services to remove barriers, a unified system for monitoring port traffic involving all necessary branches of the federal government, and improved highway and rail access. As part of a larger set of actions associated with the country's infrastructure in general, Brazil hopes to lower the costs of shipping agricultural products and consequently improve the country's export performance.

**Security**  
In July 2004, Brazil adopted the International Ship and Port Facility Security Code (ISPS Code). The code prescribes a number of security improvements designed to strengthen maritime security and prevent and suppress acts of terrorism against shipping.

In order to more efficiently keep up with new security improvements, significant investments will be required. A Need for sophisticated technologies such as equipment scanners for detection of explosives, or systems to ensure proper registration of ships and containers is anticipated. Source: <http://www.abtp.com.br>.



This is a list of the primary investment plans that CS Brazil believes will take place in this sector in 2005 and 2006.

Partial List of Private and Public Projects Under Construction or Soon to Start.				
Company	Location	Value US\$ Million	Description	Term
Hamburg Sud		390.0	Renovation of container-ship fleet	2005
Ferronorte/ Bunge Alimentos e Grupo Maggi	Santos Port (SP)	71.4	Construction of the Guarujá Grain Terminal, making it the largest private port in Brazil.	2003/2004
Mercosul Line	Itajaí Shipyard	70.0	Construction of two new boats for cabotage in Manaus-Santos way.	2004
TCP	Paranaguá Port (PR)	18.5	Acquisition of new equipment and construction of 80 thousand meters of pier pavement.	2004
ICTSI	TECON/Suape	18.0	Port expansion and new equipment acquisition	2004/2005
Teconvi	Itajaí Port	8.9	Improvement projects	2004
Tecon	Salvador Port (BA)	0.81	Acquisition of 2 Swedish stacking machine model	2005
	Santos Port (SP)	12.0	Acquisition of 2 portainers	2004
		1.4/unit	Acquisition of 15 rolling bridges	2004 on
		13.0	Construction of a new car boarding site	2004/2005
Tecon	Rio Grande Port (RS)	30.0	Construction of a third cradle, crane acquisition, rail road, structure improvement and storage expansion	2004
		0.5	ISPS Code Certification Program	2004
		25.0	Structural improvement and purchase of new equipment	2004
Santa Catarina State Government	Sao Francisco do Sul Port (SC)	3.2	Access channel dredging	2005
Terlogs	Sao Francisco do Sul Port (SC)	35.7	Construction of 2 surface and 5 vertical warehouses Construction of ship loaders increase of channel depth	2005
Bunge	Santos Port (SP)	150.0	Modernization of port system	2004/2005
	Rio Grande Port (RS)	4.0	Modernization of port system	2004
Federal and State of Maranhao	Itaqui Port (MA)	71.4	Expansion and improvement works	2004/2005
Private and public investment		25.0	First phase of construction of "Maranhao rain" terminal	2004/2005
Private investment	Antonina e Paranaguá Ports	41.8	Increase unloading and storing capacity – cargo- handling automation	2004
Comaphnia Brasileira de Logística	Paranaguá Port (PR)	3.6	Increase of grain storage capacity	2004
Tecondi	Santos Port (SP)	5.4	New terminal area and equipment acquisition	2004
CVRD		3.9	Logistic management system	2004
Hermasa Navegacao da Amazonia S/A	Itacoatiara (AM)	42.7	Increase grain transportation through the Rio Madeira river and double the capacity of flowing terminal	2004
Aliança Navegação e Logística	Vila do Conde (PA) and Vitória Ports		Expansion of cabotage shipping operation	2004
Docenave		70.0	Cabotage operation expansion	2004
Grupo Battistella	Santa Catarina State	100.0	Construction of the Santa Catarina Port facility	2005
Wilson Sons	Rio Grande Port (RS)	60.0	Construction of 2 docking berths	2004/2020
		25.0	Berth expansion	2004/2005
State of Sao Paulo	Sao Sebastian Port (SP)	89.9	First phase of expansion works	2004
State of Sao Paulo and private investment		196.4	Second phase of expansion works	2006
State of Parana	Paranaguá (PR)	142.9	Port improvement	2004/2005
Federal Government and private investment	Santos Port (SP)	1,071.4	Array of works	2005/2006



### Key Contacts

- For more information about export opportunities in this sector contact US Commercial Service Trade Specialist Júlio Siqueira at:  
[julio.siqueira@mail.doc.gov](mailto:julio.siqueira@mail.doc.gov)
- For a good overview of exporting to Brazil, please look at our US Country Commercial Guide to Brazil:  
[www.focusbrazil.org.br/ccg](http://www.focusbrazil.org.br/ccg)
- US Commercial Service in Brazil:  
[www.buyusa.gov/brazil](http://www.buyusa.gov/brazil)
- For more reports on this sector in other countries, please visit Export.gov's site for US Commercial Service Market Research Worldwide:  
<http://www.export.gov/marketresearch.html>
- For more information, please check the following web sites:
  - Ex-Im Bank:  
[www.exim.gov](http://www.exim.gov)
  - Brazilian Ministry of Foreign Affairs:  
[www.mre.gov.br](http://www.mre.gov.br)
  - Brazilian Ministry of Planning:  
[www.planejamento.gov.br](http://www.planejamento.gov.br)
  - Brazilian Ports and Terminals Association:  
<http://www.abtp.com.br>
  - Government of Pará:  
[www.cdpara.pa.gov.br](http://www.cdpara.pa.gov.br)